PROCESSING FIXED-FORMAT DATA IN A UNICODE ENVIRONMENT

ABSTRACT OF THE DISCLOSURE

A computer system and object-oriented method and class for use with the computer system to convert data in Unicode format back and forth to data having a fixed-length format, such as EBCDIC, and to allow editing of the data and return the edited data back to its original format without loss of bytes. Conversely, the method, class, and computer system also allow the downloading of data in a fixed-length format into a Unicode environment, the fixed-length format is converted into an editable form and then reconverted back into the fixed-length format without loss of bytes. The method accommodates UTF-8, UTF-16, and UTF-32. Once the fixed-length of the data has been determined, a byte array is created and an attribute indicating whether a character is a single byte character or a double-byte character is assigned to each byte in the array. The array and subset arrays representative of fixed-length fields within the fixed-length statements may then be truncated, and/or repaired at either or both the beginning and the end, and/or right- or left- aligned to realize a version of the data that can be displayed and edited without loss of bytes. Once edited, using the assigned attributes, the byte array can be converted to code having the fixed-length format or can be translated back to Unicode.